

## ABSTRACT

It is an object of the invention to provide a motor control apparatus capable of ensuring a control function even for a large inertia moment ratio.

In a motor control apparatus including a position detecting portion (1B) of a motor (18) for driving a mechanism a moment of inertia of which is unknown, a speed calculating portion (1C), a position control portion (15) for outputting a speed reference by inputting a difference between a position reference and a position of the motor, a speed control portion (16) for inputting a difference between the speed reference and a speed of the motor, a torque control portion (17) for controlling a torque of the motor from a torque reference, and an inertia variation restraining portion (13) for outputting the torque reference by predicting a disturbance of the motor from the torque reference and the speed of the motor, the motor control apparatus further includes a phase compensating portion (14) for inputting the speed reference and inputting a speed advancing a phase to the speed control portion as a new speed reference, regards the torque of the motor generated by a deviation in a set value with regard to an actual moment of inertia as a disturbance and compensates for the disturbance by the inertia variation restraining portion (13) and the phase compensating portion (14).